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ABSTRACT

Because of the close relationship between self-concept and behavior, knowledge and understanding of self-perception is vital to improving communicative behavior. A few measurement instruments have been developed that globally assess the self-concepts of communicators and public speakers. Self-concept concerning communication ability is, however, many-faceted. This paper presents an original instrument, the Index of Self-Concept as a Communicator, which assesses the following aspects of self-concept: small-group and dyadic ability, public-speaking ability, listening skills, language ability, content factors (judgment of worth of one's ideas, reasoning ability, and desire to communicate), and persuasive ability. The procedures used to obtain validation of the scale are described, and the scale itself is included. (KS)

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DEVELOPMENT OF AN INSTRUMENT TO MEASURE SELF-CONCEPT AS A COMMUNICATOR

Sandra Hochel

Recent textbooks in speech communication stress the importance of an individual's knowing and understanding his or her self-concept.[1] A knowledge and understanding of self perception is a vital step in improving communicative behavior because of the close relationship between self-concept and behavior. The psychologists Hall and Lindzey define the self-concept "...as a group of psychological processes which govern behavior and adjustment."[2] Syngg and Combs similarly stress the relationship between self-concept and behavior: "What a person does and how he behaves are determined by the concept he has of himself and his abilities."[3] Numerous other theorists also write that the self-concept is a direct behavioral determinant.[4] Researchers in speech communication also provide evidence that a person's concept of self as a communicator is closely related to behavior.[5] Because of this close relationship, a knowledge of the self-concept is one of the best ways to predict and understand behavior. Not only do students need to be made aware of the importance of their self-concepts as communicators, but speech teachers need to be cognizant of their students' perceptions of themselves as communicators as well.

In order to aid teachers in understanding the way students view themselves, a few instruments have been developed which globally assess the self-concept of a communicator and of a public speaker.[6] Yet an instrument which will measure an

CS 501 730

individual's image of his communication abilities in different structures (e.g., public speaking and dyadic situations) and elements (e.g., language usage and listening) is definitely needed because self-concept is segmented and made up of many facets. The educational psychologist McCandless writes, "We shall regard the self-concept as complex, made up of many facets.... Expectancies have been learned for each facet, so that the individual can predict success or failure in connection with behavior that pertains to a given facet."[7] Gergen, Del Polito, Anderson, Brookover and Paterson, Brooks and Keltner are other writers who point out that there are several facets or dimensions to an individual's self-concept.[8] Self-concept as a communicator is one facet of the general self-concept, but self-concept as a communicator is also segmented into the different structures and functions of communication situations. Just as a person's concept of himself as a mathematician and a reader may vary, so also a person's concept of himself as a public speaker may vary from his perception of himself as a listener or a group participant.

The knowledge of how a person perceives his or her communication abilities in various situations or roles would be helpful to speech teachers and would provide more helpful information than a global assessment. For example such an instrument would permit early identification of persons harboring serious doubts about their abilities to communicate and would also identify specific areas where help is needed. Additionally the tests results would provide needed infor-

mation to determine course objectives, develop teaching strategies, and adapt courses to the individual needs of students. The instrument is particularly suited to answering the important question, "After completing the course, are the students more confident in their abilities to communicate?" The test results will allow teachers to evaluate the effectiveness of a course in specific areas. For example, the instrument distinguishes between self-concept as a public speaker and as a listener, thus allowing the teacher to compare course effectiveness in these areas.

Because no instrument is available which has separate dimensions of structures and elements and because such an instrument would serve a variety of educational needs, the "Index of Self-Concept as a Communicator" (ISCC) was developed. The purpose of this paper is to report the development of the ISCC.

CHOICE OF MEASUREMENT APPROACH

A modified Likert-scale[9] was selected because it can be administered and scored quickly and efficiently and because data are available which provide evidence that the approach can yield a reliable and valid instrument when properly constructed.[10] Another advantage of this approach is that it provides freedom in describing behavior across a variety of communication situations.

DETERMINING THE DIMENSIONS

Since the researcher's purpose was to develop an index

of a person's conception of his use of the elements of communication in different structures, a workable categorization of salient structures and elements was needed. To determine the dimensions to be included in the ISCC, the following procedure was employed.

Students (N=95) enrolled in a basic communication course wrote themes during the first week of the course on their perceptions of their abilities to communicate. All direct and declarative statements which clearly related to an individual's ability to communicate were extracted from the themes. Similar items were also extracted from Rossilon's "Speaker's Self-Concept Scale"[11] and from Crowell, Miyamoto, and Katcher's "Communicator Questionnaire" and "Communicant Questionnaire".[12] These instruments were selected because the test developers relied upon individual's self-descriptions of communication abilities for test items. This procedure produced 410 items.

Five instructors of communication then thoroughly and independently analyzed the self-descriptions to discover a phenomenological system for classifying the statements. This phenomenological approach was designed to answer the question: What distinction between communication structures and elements did these students make in their ability to communicate?

All judges noted that these students made a sharp distinction in their abilities to communicate in public speaking situations from their abilities to communicate in small group and dyadic situations, but they did not usually make a distinction between small group situations and dyadic situations.

Some elements (e.g., delivery, bodily action, and reticence) were never mentioned apart from a structure (e.g., "My delivery is hesitant and weak when I speak before a group," and "I feel inhibited when I am expected to contribute something to a discussion"). However, four elements--listening, reasoning, language usage, and persuasive ability--were also considered isolated from a structure (e.g., "I feel I am deliberate in my thought processes," and "I feel I am rarely able to persuade others"). Judges agreed that if a statement referred to an element and a structure, it was to be classified under appropriate structure. After considerable study and several re-classifications designed to collapse dimensions, initial dimensions were selected.

The next step involved asking seven other instructors of communication to examine the categorization of the statements and to add any other statements, elements, or structures that they believed important in determining an individual's self-concept as a communicator. No other structures or elements were added.

The above procedure produced six initial dimensions. The dimensions, explanations, and sample statements are given below.

1. Small Group and Dyadic--judgment of general ability to communicate in small group and dyadic situations. For example: "I have difficulty in thinking of an appropriate remark to make in group discussion," and "I feel at ease in group discussion."
2. Public Speaking--judgment of general ability to com-

municate in a public speaking situation. For example: "I get up to speak with the feeling that I shall surely fail," and "I like to observe the reactions of my audience to my speech."

3. Listening--judgment of ease and persistence in listening in different situations. For example: "I find myself not listening to other people because I am preoccupied with my own ideas," and "I can listen very well even if those around me are not paying attention."
4. Language--judgment of ability to use words effectively in different situations. For example: "I find it easy to change my language if I see my ideas are not getting across," and "I think I use the best language possible."
5. Content--judgment of worth of one's ideas, reasoning ability, and desire to communicate. For example: "People seem interested in what I have to say," "I feel I am deliberate in my thought processes," and "I like to share my ideas with others."
6. Persuasion--judgment of ability and desire to persuade others. For example: "If others disagree with me, I will try to persuade them to my point of view," and "Others always out-argue me."

These dimensions were initially selected for use as subscales for the ISCC. However, the finality of the six subscales was subject to change. The following factors determined whether the dimensions would be included in the final instrument:

1. The subscale's discriminative powers as determined by

discrimination indices of items of the subscale. These discrimination indices are based on coefficients of correlation between score on an item and score on the subscale.

2. The subscale's distinctiveness as determined by inter-correlation with the other subscales. For example, if scores on two subscales correlated .90, then these scales should be combined insomuch as they measure similar constructs.

The next step in the test construction was the selection of items on each subscale and the final determination of the subscales.

SELECTION OF ITEMS AND SUBSCALES

The researcher selected eighty items from the original pool of 410 statements. The majority of statements were eliminated because of duplication, and others were eliminated because they did not meet the criteria for selecting items for Likert scales.[13] The eighty items were randomly ordered and administered to 320 college students. Means, standard deviations, and discrimination indices were computed. The eighty items were also given to five professors of communication who were instructed to sort the items into the dimensions listed previously.

The final forty-five items utilized in the ISCC were:

1. those items on which there was perfect agreement in the categorization of the five judges;
2. the items within a subscale with the highest discrimination indices; and
3. the items that were positively and negatively worded

so that the test as a whole would be approximately half positive and half negative.

The researcher was able to select nine items on five subscales on which judges unanimously agreed and that had high (.40 and up) or moderate (.20 and up) discrimination indices.[14] Because all items on the dimension "Persuasion" had low and/or negative discrimination indices, this subscale was dropped from the final instrument. On the completed instrument, items of the five subscales are not grouped or labeled in any way. For the randomly-arranged items of the final instrument, see Table 1. Table 2 lists the items of each subscale.

After the items for the five subscales were selected, discrimination indices of the items on each subscale were determined. It was hypothesized that items of a subscale would have higher discrimination powers with subscale scores than with total scores. This analysis was performed with the data obtained when the 45-item test was administered to 199 college students. Item discrimination indices with total and subscale scores are presented in Table 3. The table indicates that every item had higher discriminative powers with its subscale score than with total score.

One final analysis was performed to check the distinctiveness of the subscales. Using the data collected from 199 college students, scores on each subscale were correlated with scores on the other subscales and the total scores. This investigator expected a moderate correlation (.40 to .70) among the scores on each subscale.[15] For example, it was expected that scores

on the Listening Subscale would not correlate highly (above .70) with scores on the other subscales and total score since many variables, in addition to listening, determine communication abilities. But listening is nonetheless an important variable; thus a positive, yet moderate, correlation was expected. There are admittedly overlapping variables. For example, language usage is a factor influencing success in public speaking, but certainly not the only factor; and so a substantial yet moderate correlation between these two subscales was expected. If correlations were extremely high between any subscales or total scores, then the distinctiveness of the subscale would be questionable.

Table 4 presents the correlation matrix of subscale and total scores. The correlations ranged from .350 to .707, showing a moderate relationship. Thus, with the highest correlation coefficient (.707) between two ISCC scores, the proportion of common variance accounted for was only 50 per cent. The square of the correlation coefficient indicates the amount of common variance between two measures. When the coefficient is .707, the corresponding proportion of common variance is.500. Thus 50 per cent of the total variance is <u>unaccounted for</u> by the relationship of the two measures. Since all subscales attempt to measure self-concept as a communicator, a substantial relationship between the ISCC scores was expected. However, this researcher believes that each subscale is measuring "something" which is not accounted for by the common relationship among them. It is argued that this "something" is the construct

measured by each subscale.

ADMINISTRATION AND SCORING

The ISCC is self administering and requires no instructions beyond those on the cover sheet of the test. When using IBM cards to record responses, most subjects complete the test in 10 to 15 minutes.

The seven choices are scaled progressively on the positively worded items with values of one for the "Almost Never" choice to seven for the "Almost Always" choice. The score values for the negatively worded items are reversed. This scoring yields a potential range of scores from 45 to 315, with scores in the top range indicating high self-concept, and scores in the low range indicating low self-concept. Each subscale has a potential range of scores from 9 to 45.

RELIABILITY

A test-retest reliability estimate was used to assess the stability of the instrument. The reliability coefficients presented in Table 5 are based on a test-retest with 93 college students over a fifteen-day period. The coefficients obtained from the retest are high and support the reliability of the subscales and total score.[16]

A split-half reliability coefficient obtained from 301 college students was used to estimate the internal consistency of the ISCC "Total Score". The coefficient adjusted by the Spearman-Brown Prophecy Formula was .91. This estimate is also satisfactory and attests to the Total Scores' reliability.

VALIDITY

The National Committee on Test Standards labels the three aspects of validity as content validity, criterion-related validity, and construct validity.[17] In keeping with their recommendations, this section is divided into a discussion of three characteristics of validity.

Content Validity. The procedure used in developing the ISCC was designed to insure that the test was a valid index of the construct of self-concept as a communicator. The phenomenological classification, experts' opinion, internal analysis of test reliability, item-discriminating powers, and the intercorrelation of subscales provide evidence of content validity.

Criterion-Related Validity. Obtaining a measure of a criterion which is a direct guage of a person's self-concept as a communicator is difficult. A person's communicative behavior in his total environment is the only external criterion which provides a direct measure of the construct in question. However, it was not feasible to directly observe Ss' use of the elements of communication in activities outside of the classroom. Whether the observation in the classroom is indicative of a person's communicative ability is subject to the competency of the observer and the "artificial" and limited classroom setting. This researcher fully recognized the limitations of using observer's judgment of communication ability yet, nonetheless, believed that the use of this external criterion was better than none.

The ISCC was administered at mid-semester in three upper division "performance-oriented" communication courses. At the

end of the semester, students' grades on all performance activities were obtained and correlated with subscales and total scores on the ISCC. A high correlation was not anticipated since factors, in addition to self-concept as a communicator, influence students' grades. However, a moderate and positive correlation was expected.

Pearson Product-Moment Correlation Coefficients were calculated between ISCC scores and grades of seventy-one students enrolled in a public speaking course. The researcher hypothesized that grades would significantly correlate ($p \leq .05$) with scores on the Public Speaking subscale and the Total Score. The results which are presented in Table 6 confirmed the hypothesis. In addition to significantly correlating with scores on the Public Speaking subscale and Total Scores, public speaking grades also correlated significantly with scores on the Small Group and Dyadic and Content Subscales.

The researcher also hypothesized that grades in discussion activities (N=83) and grades on interviews (N=59) would significantly correlate ($P<.05$) with scores on the Small Group and Dyadic subscale and total scores. The results are presented in Table 6. The analysis revealed a significant correlation between discussion grades and the two predicted variables. A significant correlation also existed between discussion grades and scores on the Listening subscale. However, a significant correlation was not found between interviewing grades and scores on the Small Group and Dyadic subscale or the total scores.

Construct Validity. In attempting to provide some answers

to the question, "What constructs account for variance in test performance?", the researcher used two procedures discussed by Cronbach and Meehl in their comprehensive article on construct validity.[18]

One validation procedure suggested by Cronbach and Meehl is to analyze expected group differences.[19] Self-theory would lead us to expect predictable self-concept differences in groups where experiences and knowledge are different. Experienced counselors would be expected to have a higher self-concept of their ability to communicate in small group and dyadic situations and of their ability to listen effectively than would college freshmen. To test this expectation, twenty-one subjects who had at least a Master's degree in Counseling and a year's experience and fifty-four college freshmen were administered the items on the Small Group and Dyadic and Listening subscales. A Fisher's "t" test was run to determine whether the counselors' scores significantly differed ($p<.05$) from the freshmen's scores. The results in Table 7 confirm this expectation.

A second test of construct validity was based on expected group differences between college freshmen and "communication experts." Because the experience and knowledge of persons who teach communication courses and who hold at least a Master's degree in communication ("communication experts") are different from the experience and knowledge of most college freshmen, a difference in the self-concept as a communicator is expected for the two groups. The ISCC was administered to twenty-seven "communication experts" who met the specification above and to

fifty-four college freshmen. A Fisher's "t" test was run to determine whether a significant difference ($p < .05$) existed between the means of the two groups. The results are presented in Table 8. Since a significant difference was found to exist between the means on all subscales and total score, the expectation was confirmed.

A second validation procedure discussed by Cronbach and Meehl is to analyze an instrument's correlation with other tests which are presumed to measure some aspect of the same construct.[20] This procedure involved locating instruments which measured constructs that overlap with or influence the construct of self-concept as a communicator. Instruments designed to provide a measure of generalized self-concept, generalized anxiety, and communication-bound anxiety were selected.

The researcher selected a widely-used generalized self-concept scale, the Tennessee Self Concept Scale (TSCS), for correlation with the self-concept as a communicator scale. The instrument was selected because numerous studies are available which support the validity and reliability of the instrument.[21] The TSCS was designed to provide a multi-dimensional description of the self-concept. The Scale consists of 100 self-descriptive statements which the subject uses to portray his own picture of himself. This researcher selected the total positive score and nine subscale scores of the TSCS for correlation with the ISCC. The researcher hypothesized that the scores on the TSCS subscales "Personal Self," "Social Self,"

"Self-Satisfaction," "Behavior" and "Total Positive" would correlate higher with the ISCC subscales and total scores than would the scores on the TSCS subscales "Physical Self," "Moral-Ethical Self," "Family Self" and "Identity." To test this hypothesis, the TSCS and the ISCC were administered to thirty-eight students, and scores were correlated. The means of the correlation coefficients are higher between ISCC scores and "Personal Self" ($\bar{x}$ = .405), "Social Self" ($\bar{x}$ = .434), "Self-Satisfaction" ($\bar{x}$ = .356), "Behavior" ($\bar{x}$ = .310), and "Total Positive" ($\bar{x}$ = .336) than between "Physical Self" ($\bar{x}$ = .240), "Moral-Ethical Self" ($\bar{x}$ = .240), "Family Self" ($\bar{x}$ = .066), and "Identity" ($\bar{x}$ = .089). The coefficients confirm the expectation.

The Institute for Personality and Ability Testing's (IPAT) Anxiety Scale Questionnaire was selected for use as a measure of generalized anxiety.[22] The IPAT Anxiety Scale is a brief and nonstressful questionnaire designed to measure manifest anxiety level, whether it be situationally-determined or relatively independent of the immediate situation. Since anxiety is a factor influencing a person's ability to communicate,[23] and since high score on the IPAT Scale indicates high anxiety, a moderate negative correlation was expected between the IPAT scores and the ISCC scores.

The IPAT and ISCC were administered to thirty-nine college students. Table 9 contains the product-Moment Correlation Coefficients between the IPAT Total Scores and the ISCC subscale and total scores. Moderate negative correlations were obtained, and offer evidence of construct validity.

The final instrument selected was one that measures communication-bound anxiety. McCroskey's "Personal Report of Communication Apprehension for College Students" (PRCA) was selected.[24] The PRCA is a twenty-item Likert-type scale designed to provide an index of a person's anxiety when communicating with other people. Since high scores on the PRCA indicates high communication-bound anxiety, a negative correlation was expected between PRCA and ISCC scores. Since an examination of the PRCA revealed that approximately half of the items related to public speaking, a high correlation was predicted to exist between scores on the Public Speaking subscale and the PRCA. A moderate correlation was expected between PRCA scores and scores on the ISCC subscales Small Group and Dyadic, Language, and Content, and on Total score. Communication-bound anxiety does not seem to be a strong factor associated with listening ability; therefore, a low correlation was expected between scores on the listening subscale and PRCA scores.

To test these predictions, the ISCC and the PRCA were administered to fifty-two freshmen college students. The correlation coefficients are presented in Table 10. The results are as anticipated and provide evidence of construct validity.

CONCLUSION

The procedure used in developing the ISCC and the statistical analysis of items and subscales attested to the content validity of the instrument. The correlation coefficients between grades on public speaking and discussion performance and ISCC scores provided some evidence of criterion-related validity. However, grades on interviews did not furnish evidence of criterion-related validity. Although these data call for a closer examination of the Small Group and Dyadic subscale, it does not nullify the evidence of content and construct validity. The difference in known groups denoted construct validity. Correlation between scores on the ISCC and measures of generalized self-concept, generalized anxiety, and communication-bound anxiety indicated that the ISCC is related to the constructs these instruments measure, but is a specific measure of a phenomenon not isolated by the instruments. The researcher believes that based on the data presented in this article the ISCC appears to provide a valid and reliable measure of the construct in question. However, as with any newly-developed instrument, more research is needed to verify and expand upon the data presented in this article.

FOOTNOTES

[1]For example see: Saundra Hybels and Richard L. Weaver, II, Speech/Communication (New York: D. Van Nostrand Company, 1975); William Brooks, Speech Communication (Dubuque, Iowa: William C. Brown Company, 1974); John Keltner, Interpersonal Speech-Communication: Elements and Structures (Belmont, Calif.: Wadsworth Publishing Company, 1970); and Jim Hughy and Arlee Johnson, Speech Communication: Foundations and Challenge (New York: Macmillan Publishing Company, 1975).

[2]C. S. Hall and G. Lindzey, Theories of Personality (New York: The Wiley Company, 1957), p. 468.

[3]Donald Syngg and Arthur Combs, Individual Behavior (New York: Harper and Row, 1957), p. 242.

[4]Carl Rogers, who has long been concerned with the relationship of self-concept and behavior, believes that a person acts in accordance with his perceptions and that behavior alters as the self-concept alters. See his discussion in Carl R. Rogers, "The Facilitation of Significant Learning," Instruction: Some Contemporary Viewpoints, ed. L. Siegel (San Francisco: Chandler Publishing Company, 1967). For additional analysis see: Sidney Jourard, The Transparent Self (Princeton, N. J.: Van Nostrand Company, 1964); William Fitts, "Dimensions of the Self-Concept," Messages: A Reader in Human Communication, ed. Jean Civikly (New York: Random House, 1977); Wallace Labenne and Bert Greene, Educational Implications of Self-Concept Theory (Pacific Palesades, Calif.: Goodyear Publishing Company, 1969); Prescott Lecky, Self-Consistency (New York: Island Press, 1945) and Abraham

Maslow, Motivation and Personality (New York: Harper and Brothers, 1954).

[5]See: Laura Crowell, Allan Katcher, and S. Frank Miyamoto, "Self-Concepts of Communication Skills and Performance in Small Group Discussion," Speech Monographs, 22 (March, 1955), 20-27; Robert Ferullo, "The Self-Concept in Communication," Journal of Communication, 13 (June, 1963), 77-86; William D. Brooks and Sarah M. Platz, "The Effects of Speech Training upon Self-Concept As a Communicator," Speech Teacher, 17 (January, 1968), 44-49; James McCroskey, "The Effect of the Basic Speech Course on Student Attitudes," Speech Teacher, 16 (March, 1967), 115-117; S. Frank Miyamoto, Laura Crowell, and Allan Katcher, "Self-Concepts of Communication Skills among beginning Speech Students," Speech Monographs, 23 (March, 1956), 66-74; and Joseph Rossillon, "The Construction and Validation of a Forced-Choice Scale to Measure Students' Self-Concepts of their Effectiveness as Speakers," Diss. Southern Illinois Univ., 1966. For a brief summary of related research see Wayne N. Thompson, Quantitative Research in Public Address and Communication (New York: Random House, 1967), p. 190.

[6]Crowell, Katcher, and Miyamoto, 20-27; Ferullo, 77-86; McCroskey, 115-117; and Joseph Rossillon, 168-170.

[7]Boyd McCandless, Children: Behavior and Development (New York: Holt, Rinehart and Winston, 1967), p. 258.

[8]Kenneth Gergen, The Concept of Self (New York: Holt, Rinehart and Winston, 1971); Carolyn Del Polito, Intrapersonal Communication (Menlo Park, Calif., 1977); Camilla Anderson,

"The Self-Image: A Theory of the Dynamics of Behavior," Mental Hygiene, 36 (1952), 227-228; Thomas Brookover, Thomas Shailer, and Ann Paterson, "Self-Concept of Ability and School Achievement," Sociology of Education, 37 (Spring, 1964), 271-278; Brooks, Speech Communication, 39-55; and Keltner, 44-60.

[9]Instead of the five Likert choices ranging from "Strongly Disapprove" to "Strongly Approve," seven multiple choices were allowed ranging from "Almost Never" to "Almost Always." This modification puts the choice response on a frequency basis which is more important in this study than the original intensity basis.

[10]See for example: A. L. Edwards, Techniques of Attitude Scale Construction (New York: Appleton-Century-Crofts, 1957) and Marvin Shaw and Jack Wright, Scales for the Measurement of Attitudes (New York: McGraw-Hill, 1967).

[11]Rossilon, 130-140.

[12]Crowell, Miyamoto, and Katcher, 20-27.

[13]See Rensis Likert, "A Technique for the Measurement of Attitude," Archives of Psychology 140 (1932), 44-53; and Edwards, 13-14.

[14]This definition of high and moderate discrimination is taken from Robert Ebel, Measuring Educational Achievement (Englewood Cliffs, N. J.: Prentice-Hall, 1965), 281-307.

[15]The definition of moderate correlation is taken from J. P. Grilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill, 1956), p. 145.

[16]This stability estimate is also relevant to construct validation. Cronbach and Meehl write that test-retest coefficients

attest to the construct validity of an instrument if a high degree of stability is a characteristic of the construct being measured. See Lee Cronbach and Paul Meehl, "Construct Validity in Psychological Tests," Psychological Bulletin, 52 (1955), 281-302.

[17]National Committee on Test Standards, "Three Characteristics of Validity," Educational and Psychological Measurement, eds. David Payne and Robert McMorris (Waltham, Mass.: Blaisdell Publishing Company, 1967).

[18]Cronbach and Meehl, 281-302.

[19]Cronbach and Meehl, p. 289.

[20]Cronbach and Meehl, p. 290.

[21]For a discussion of these studies see William Fitts, Manual: Tennessee Self Concept Scale (Nashville, Tenn.: Counselor Recording and Tests, 1965).

[22]For detailed information on this questionnaire see R. B. Cattell and I. H. Scheier, Handbook for the IPAT Anxiety Scale and Questionnaire (Champaign, Ill.: Institute for Personality and Ability Testing, 1963).

[23]See Theodore Clevenger, "A Synthesis of Experimental Research in Stage Fright," Quarterly Journal of Speech, 45 (April, 1959), 134-145, and Wayne Thompson, Quantitative Research in Public Address and Communication (New York: Random House, 1967).

[24]James McCroskey, "Measures of Communication-Bound Anxiety," Speech Monographs, 37 (1970), 269-277.

TABLE 1

INDEX OF SELF-CONCEPT AS A COMMUNICATOR

Please respond to the statements in this questionnaire by indicating how you perceive yourself as a communicator. Indicate your reactions to every item. Move rapidly from one item to the next and give your initial reaction to each item. In marking this questionnaire, read each statement carefully and then select one of seven alternatives. The alternatives are arranged on a continuum from 1 (Almost Never) to 7 (Almost Always). Number 4 represents the central or neutral position.

1. I find it easy to change my language if I see that my ideas are not getting across.
2. I am fearful and tense all the while I am speaking before a group of people.
3. Regardless of who I am talking to, I am a good conversationalist.
4. I feel pretty confident in my ability to communicate in an informal discussion.
5. It is hard for me to think of examples which will help clarify whatever I am explaining.
6. I feel I am deliberate in my thought processes.
7. I have trouble forming ideas into words.
8. When other people are talking, my mind wanders.
9. I get up to speak with the feeling that I shall surely fail.
10. My ability to express myself remains pretty much the same regardless of who I am talking to.
11. I feel inhibited when I am expected to contribute to a discussion.
12. I think I can effectively use audio-visual aids when speaking before a group.
13. It is difficult for me to tell if the person I am talking to agrees with what I am saying.
14. I express myself in a clear and well-organized manner.
15. I like to share my ideas with others.
16. I find it hard to get people interested in what I have to say.
17. If I feel that people disapprove of what I am saying, I find it extremely difficult to express myself clearly.
18. People seem interested in what I have to say.
19. I know when I have expressed my ideas clearly.
20. When listening to a speech, my interest is hard to hold.
21. I know what I want to say but not how to say it.
22. Even if I disagree with a person, I will listen to what he has to say.
23. I have difficulty communicating when in a formal interviewing situation.
24. If people do not understand me in conversation, I am happy to explain.
25. I have difficulty in thinking of an appropriate remark to make in group discussion.
26. I enjoy speaking before a group of people.
27. I have difficulty putting complex ideas into words.
28. When I talk, other people listen carefully.

TABLE 1 (continued)

29. My delivery is hesitant and weak when I speak before a group.
30. When talking with others, I find myself thinking of what I am going to say instead of listening to them.
31. I feel that I have something worth saying.
32. I like to observe the reaction of my audience to my speech.
33. I avoid speaking situations.
34. It is easy for me to summarize the main points brought up in a group discussion.
35. Although I talk fluently with friends, I am at a loss for words on the platform.
36. I feel at ease in a group discussion.
37. I believe that if I tried hard enough I could effectively communicate with almost anyone.
38. I can listen very well even if others around me are not paying attention.
39. Even if I cannot easily understand what a person is saying, I continue to pay attention.
40. I think I use the best language possible.
41. I find it hard to concentrate for a long period of time on what other people are saying.
42. I fear my hands will shake when I speak.
43. I feel my ideas are important and worth telling to others.
44. I find myself not listening to other people because I am preoccupied with my own ideas.
45. In conversation with another person, I get so wrapped up in trying to understand a particular thing that I lose the train of thought.

TABLE 2

Subscales and Items of the Index of Self-Concept as a Communicator

Subscales	Items*
Small Group and Dyadic	3, 4, 11, 13, 23, 24, 25, 34, 36
Public Speaking	2, 9, 12, 26, 29, 32, 33, 35, 42
Listening	8, 20, 22, 30, 38, 39, 41, 44, 45
Language	1, 7, 10, 14, 17, 19, 21, 27, 40
Content	5, 6, 15, 16, 18, 28, 31, 37, 43

* Numbers correspond to items in Table 1.

TABLE 3

Dicrimination Indices
for
Item-Total and Item-Subscale* (N = 199)

	Item-Total	Item-Subscale		Item-Total	Item-Subscale
**1.	.5613	.6072	24.	.5156	.5752
2.	.5751	.7469	25.	.6981	.7590
3.	.4612	.5481	26.	.5811	.7490
4.	.4415	.5743	27.	.7270	.7527
5.	.4160	.5052	28.	.5714	.6698
6.	.2855	.4112	29.	.6826	.7898
7.	.4928	.6637	30.	.3176	.5492
8.	.3624	.6285	31.	.5746	.7037
9.	.5362	.6657	32.	.5385	.6169
10.	.3913	.5172	33.	.6262	.7539
11.	.5154	.6058	34.	.6019	.6213
12.	.4633	.4804	35.	.6159	.8144
13.	.3822	.5094	36.	.6406	.7559
14.	.6543	.6844	37.	.5068	.5997
15.	.5439	.5696	38.	.4112	.6333
16.	.4679	.5639	39.	.4140	.6100
17.	.4329	.4869	40.	.4877	.5735
18.	.5511	.7175	41.	.4683	.6986
19.	.4090	.4574	42.	.4788	.6123
20.	.2493	.5879	43.	.5950	.7121
21.	.5941	.7936	44.	.3569	.6219
22.	.3858	.3913	45.	.4139	.5006
23.	.4804	.5865			

*Item-Total discrimination is based on correlation coefficients between the score on an item and total score on the test. Item-Subscale is based on correlation coefficients between score on an item and score on the subscale.

**For test item corresponding to each number, see Table 1.

TABLE 4

Intercorrelations of ISCC Scores (N = 199)

ISCC*	1	2	3	4	5	6
1	1.000					
2	.707	1.000				
3	.401	.350	1.000			
4	.707	.692	.485	1.000		
5	.685	.614	.480	.698	1.000	
6	.497	.431	.532	.506	.520	1.000

*Key for this and subsequent tables:

1-Small Group and Dyadic Subscale
2-Public Speaking Subscale
3-Listening Subscale
4-Language Subscale
5-Content Subscale
6-Total Score

TABLE 5

Test-Retest Reliability Coefficients

ISCC	1	2	3	4	5	6
	.911	.906	.895	.878	.854	.932

Based on test-retest with 93 college students over a fifteen day period.

TABLE 6

Correlation Between Performance Grades
And ISCC Scores

	ISCC					
	1	2	3	4	5	6
Public Speaking Grades (N = 71)	.308**	.416***	.174	.227	.350**	.243*
Discussion Grades (N = 83)	.214*	.154	.225*	.189	.213	.324**
Interviewing Grades (N = 59)	.140	.133	.079	.155	.059	.113

*Significant at .05 level
**Significant at .01 level
***Significant at .001 level

TABLE 7

t-test Analysis of
Counselors and College Freshmen's ISCC Scores

	Means Counselors (n = 21)	Means Freshmen (n = 54)	t value
Small Group and Dyadic	53.00	43.26	5.55*
Listening	48.76	39.07	6.31*

*Significant at .001 level with 73 df

TABLE 8

t-Test Analysis of
Communication Experts and College Freshmen's ISCC Scores

ISCC	Means Com. Experts (n = 27)	Means Freshmen (n = 54)	t value
1.	52.37	43.26	5.33*
2.	53.56	40.52	6.58*
3.	44.37	39.07	3.14*
4.	47.74	39.59	5.03*
5.	51.00	44.37	4.80*
6.	248.48	206.82	6.48*

*Significant at .001 level with 79 df

TABLE 9

Correlation Between IPAT and ISCC Scores (N = 39)

	ISCC 1	2	3	4	5	6
IPAT Total Score	-.528	-.530	-.409	-.442	-.366	-.561

TABLE 10

Correlation Between PRCA and ISCC Scores (N = 52)

	ISCC 1	2	3	4	5	6
PRCA Score	-.381	-.719	-.175	-.385	-.352	-.570